What is COVID-19?

COVID-19 is a respiratory disease caused by a newly identified coronavirus known as SARS-CoV-2. The virus was first identified in December 2019 in Wuhan, China and quickly spread worldwide. In March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. Research is taking place worldwide to better understand the SARS-CoV-2 virus, COVID-19, what measures help to limit the spread of disease and treatment options.

How does COVID-19 Spread?

The COVID-19 virus (SARS-CoV-2) is most commonly spread when a person infected with the virus coughs, sneezes, talks, or sings, creating respiratory droplets that can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. The virus can live on surfaces or objects. As such, the virus can be transmitted when a person touches the contaminated objects and then touches their mouth, nose or eyes.

How long does it take to get COVID-19?

The incubation period, the time it takes for you to develop symptoms after you were exposed, is thought to be between 2 to 14 days after exposure. However, for most people, the average time from exposure to development of symptoms is between 5-6 days.

What are the symptoms of COVID-19?

The main symptoms seen with COVID-19 are fever, cough, shortness of breath, chills, extreme fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and/or diarrhea. But not all people have all these symptoms, and people experience a wide range of symptoms with COVID-19. The vast majority of people remain asymptomatic or have mild to moderate symptoms and fully recover. Some have severe symptoms that require hospitalization, and a small percentage of people with COVID-19 die. People with obesity (BMI>30), chronic medical conditions and older adults are at higher risk for severe illness and death.

How is COVID-19 diagnosed?

The diagnosis of SARS-CoV-2 can be suspected in anyone who has symptoms consistent with COVID-19, but a definite diagnosis requires testing. There are two kinds of tests available for COVID-19, one which tests for a current infection (PCR viral tests and antigen tests) and one which tests for a past infection (antibody tests).
PCR viral tests test for a current infection by testing for the presence of the actual COVID-19 virus. In such a test, a sample is taken from the person suspected to be infected, such as a nasal or a very deep nasal swab (i.e. nasopharyngeal), and this is analyzed by a lab to determine if the virus is present. Such tests can take a day to several days to result.

Antigens are structural components of the virus. Antigen tests test for the presence of these structural components, like the spikes on the outside of COVID-19 virus. Antigen tests are typically quicker and less expensive, but they are also less accurate.

An antibody test might be helpful to tell if the person tested had a past infection with COVID-19 but does not accurately show if this person has a current infection as it can take 1-3 weeks after an infection for a person’s body to develop antibodies. Having antibodies to COVID-19 may protect you against another infection with COVID-19 (immunity) but it is still unknown how much protection these antibodies may provide or how long this protection may last. Antibody tests should not be used to diagnose a current COVID-19 infection, and a viral PCR test is needed to determine if a current infection is present.

**Is COVID-19 serious?**

COVID-19 can cause serious symptoms and even death in certain people. People at higher risk for severe symptoms are people with obesity (BMI >30) and people with underlying health issues. Of note, this same population has an increased risk of serious illness from any respiratory or fever illness such as the flu (influenza).

At this time, the COVID-19 death rate varies by region and age group from 0% in children to 20% in older adults with pre-existing conditions. In the US the average case fatality rate (the rate of death in people diagnosed with COVID-19) among all age groups is 3.5%. The overall mortality rate (the rate of death from COVID-19 in the population as a whole) in the US among all age groups is 0.04%. Worldwide the case fatality rate among all age groups is 3.9%. Although all of these percentages are based on incomplete data as not all people are being tested for COVID-19.

In comparison, COVID-19 is far less lethal than some other outbreaks like SARS (10% case fatality rate), MERS (34% case fatality rate) Bird Flu (60% case fatality rate) and Ebola (70% case fatality rate).

**What if someone in my family gets sick with COVID-19?**

If your family member does not need hospitalization and can be cared for at home, you should help him or her with basic needs and monitor the symptoms while also keeping as much distance as possible. According to guidelines issued by the CDC, the sick family member should stay in a separate room and use a separate bathroom, if space allows. If masks are available, both the sick
person and the caregiver should wear them when the caregiver enters the room. Make sure not to share any dishes or other household items and to regularly clean surfaces like counters, doorknobs, toilets and tables. Remember to wash your hands frequently. Additionally, the CDC recommends that if you live in the same household with a person who is known to have COVID-19 that you home-isolate for 14 days after your last contact with the person known to have COVID-19 or for 14 days after the person who is sick meets the criteria to end their own home isolation.

If I was exposed to a person with COVID-19, why should I home-isolate?

If you were exposed to a person with COVID-19, it might take up to 14 days after the exposure for symptoms to develop. You can spread COVID-19 before you have symptoms. As well, there are people with COVID-19 who never have symptoms but can still spread the virus. For these reasons, the CDC has recommended 14 days of home isolation if you have been in close contact with a person who has known or suspected COVID-19.

The CDC defines “close contact” as:
- You were within 6 feet of someone sick with COVID-19 for a total of 15 minutes or more
- You provided care at home to someone who is sick with COVID-19
- You had direct physical contact with a person (hugged or kissed them) who is sick with COVID-19
- You shared eating or drinking utensils with a person who is sick with COVID-19
- You were sneezed on, coughed on, or somehow got the respiratory droplets of a person sick with COVID-19 on you

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The CDC allows “essential workers” who are exposed to COVID-19 but do not themselves have any symptoms of COVID-19, to continue to work, but requires them to take additional precautions and to closely monitor for COVID-19 symptoms.

Should I wear a mask?

The CDC has recommended that all Americans wear a mask or cloth face covering if they go out in public. Masks don’t replace hand washing and social distancing.
Is there a vaccine available for COVID-19?

There is no FDA-approved vaccine for COVID-19. However, early stages of vaccine testing have begun.

Where can I find out more about COVID-19?


Source Materials: U.S. Centers for Disease Control and Prevention (CDC) and World Health Organization